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REMARKS/ARGUMENTS

Claims 1-25 are pending in this application. By this Amendment, Applicants amend claim 12.

Claim 12 was rejected under 35 U.S.C. § 112, second paragraph, for allegedly being indefinite. Applicants have amended claim 12 to correct the informality noted by the Examiner. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

Claims 1 and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari (U.S. 6,351,502) in view of Gillig et al. (U.S. 4,989,230). Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., and further in view of the Examiner's official notice. Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., and further in view of Furutani et al. (U.S. 2002/0127973 A1). Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., and further in view of Erickson (U.S. 5,862,466). Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., and further in view of Hiraka et al. (U.S. 6,366,563). Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., and further in view of Kushitani et al. (U.S. 6,496,083). Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., and further in view of Furutani et al. (U.S. 6,100,776). Claims 8 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al. (U.S. 6,658,263). Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al., and further in view of the Examiner's official notice. Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al., and further in view of the Examiner's official notice. Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al., and further in view of Erickson. Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al., and further in

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view of Hiraka et al. Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al., and further in view of Kushitani et al. Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al., and further in view of Furutani et al. ('776). Claims 15 and 25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al., and further in view of Kitazawa et al. (U.S. 6,147,571). Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Ke et al. and Kitazawa et al., and further in view of Furutani et al. ('776). Claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., Ke et al., and Kitazawa et al., and further in view of the Examiner's official notice. Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., Ke et al. and Kitazawa et al., and further in view of Furutani et al. ('973). Claim 19 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., Ke et al. and Kitazawa et al., and further in view of Erickson. Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., Ke et al. and Kitazawa et al., and further in view of Kushitani et al. Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., Ke et al. and Kitazawa et al., and further in view of Furutani et al. ('776). Claim 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Zargari in view of Gillig et al., Ke et al. and Kitazawa et al., and further in view of Furutani et al. ('776). Applicants respectfully traverse these rejections.

Claim 1 recites:

"A high-frequency module comprising:
a high-frequency filter arranged to attenuate a spurious high-frequency signal;
a high-frequency switch arranged to switch a transmission signal and a reception signals;
a transmitter-side balun arranged to convert a balanced signal into an unbalanced signal; and
a receiver-side balun arranged to convert an unbalanced signal into

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a balanced signal;

wherein said high-frequency filter is disposed between an antenna and a first terminal of said high-frequency switch, a second terminal of said high-frequency switch is connected to an unbalanced terminal of said transmitter-side balun, a third terminal of said high-frequency switch is connected to an unbalanced terminal of said receiver-side balun, and **said high-frequency filter is a high-pass filter.**" (emphasis added)

Claim 8 recites:

"A high-frequency module comprising:

a high-frequency filter arranged to attenuate a spurious high-frequency signal;

a high-frequency switch for switching a transmission signal and a reception signal;

a transmitter-side balun for converting a balanced signal into an unbalanced signal; and

a receiver-side balun for converting an unbalanced signal into a balanced signal;

wherein said high-frequency filter is disposed between an antenna and a first terminal of said high-frequency switch, a second terminal of said high-frequency switch is connected to an unbalanced terminal of said transmitter-side balun, a third terminal of said high-frequency switch is connected to an unbalanced terminal of said receiver-side balun, and **said high-frequency filter is a notch filter.**" (emphasis added)

Claim 15 recites:

"A high-frequency module comprising:

one of a high-pass filter and a notch filter arranged to attenuate spurious high-frequency signal;

a high-frequency switch arranged to switch a transmission signal and a reception signal;

a transmitter-side balun arranged to convert a balanced signal into an unbalanced signal; and

a receiver-side balun arranged to convert an unbalanced signal into a balanced signal;

wherein said one of the high-pass filter and the notch filter is disposed between an antenna and a first terminal of said high-frequency switch, a second terminal of said high-frequency switch is connected to an unbalanced terminal of said transmitter-side balun, a third terminal of said high-frequency switch is connected to an unbalanced terminal of said

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receiver-side balun, and said high-frequency module further comprises a multilayer substrate including a laminated body having a plurality of dielectric layers." (emphasis added)

With the unique combination and arrangement of elements recited in Applicants' claims 1, 8 and 15, including a high-pass filter or a notch filter, Applicants have been able to provide a compact high-frequency module that prevents reduction in the insertion loss (see, for example, the first full paragraph on page 3 of the originally filed specification).

The Examiner acknowledged that Zargari fails to teach or suggest a high-pass filter or a notch filter. However, the Examiner alleged that Gillig et al. teaches a high pass filter and that Ke et al. teaches a notch filter. Thus, the Examiner concluded that it would have been obvious "to use a high-pass filter as the high-frequency filter. The choice filter characteristics is a routine engineering decision predicated on the type of hardware used and the operating environment that results from the regulation of the frequency spectrum. In this case, the use of a high-pass filter is beneficial in that it prevents undesired signals below a predetermined frequency from affecting the transceiver," and that it would have been obvious "to use a notch filter as the high-frequency filter. The choice filter characteristics is a routine engineering decision predicated on the type of hardware used and the operating environment that results from the regulation of the frequency spectrum. In this case, the use of a high-pass filter is beneficial in that it prevents undesired signals below a predetermined frequency from affecting the transceiver." Applicants respectfully disagree.

First, the motivation provided by the Examiner to combine Ke et al. with Zargari is clearly improper. Particularly, the Examiner alleged that it would have been obvious to use the notch filter of Ke et al. in the filter module of Zargari because "the use of a **high-pass filter** is beneficial in that it prevents undesired signals below a predetermined frequency from affecting the transceiver" (emphasis added). In other words, the Examiner has completely failed to provide any motivation to use a notch filter in the module of Zargari.

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Second, the Examiner's allegation that "the choice [of] filter characteristics is a routine engineering decision predicated on the type of hardware used and the operating environment that results from the regulation of the frequency spectrum" is nothing more than an allegation that the selection of the specific filter in the module of Zargari would have been an obvious matter of engineering design choice, which is clearly an improper motivation for combining references in an obviousness rejection. The U.S. Patent Office Board of Patent Appeals and Interferences has concluded that a rejection on this basis is clearly improper. See In re Garrett, Appeal No. 580-81 (BPAI 1986), wherein in reversing an obviousness rejection, the Board criticized that the Examiner's statement that the proposed modification would have been an obvious matter of engineering design choice with the explanation that such an assertion is a conclusion, not a reason.

At best, the motivation alleged by the Examiner for using the high-pass filter as taught by Gillig et al. or the notch filter as taught by Ke et al. in the module of Zargari amounts to an allegation that it would have been obvious to try various types of filters in the module of Zargari. This is an inappropriate standard for obviousness. That which is within the capabilities of one skilled in the art is not synonymous with obviousness. See Ex Parte Levensgood, 28 USPQ 2d 1300 (Bd. Pat. App. & Inter. 1993). The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 221 USPQ 1125 (Fed. Cir. 1984). As noted above, the prior art clearly teaches away from the combination proposed by the Examiner, instead of suggesting the combination.

Third, Zargari neither teaches nor suggests that any other type of filter could or should be substituted for the band-pass filter disclosed therein. And, in fact, the module of Zargari would clearly not operate in the manner disclosed therein if the band-pass filter 101 were replaced with the high-pass filter of Gillig et al. or the notch filter of Ke et al.

Instead of basing the conclusion of obviousness on actual teachings or suggestions of the prior art and the knowledge of one of ordinary skill in the art at the

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time the invention was made, the Examiner has improperly used Applicants' own invention as a guide. It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. In re Fritch, 972 F.2d 1260, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992).

Fourth, as clearly disclosed in Gillig et al., the high-pass filter 187 must be accompanied by the low pass filter 185 in order for the device of Gillig et al. to operate properly. Similarly, as clearly disclosed in Ke et al., the 1st combiner filter 154 must be accompanied by the 2nd combiner filter 152 in order for the device of Ke et al. to work properly. The Examiner has failed to explain how the necessary low pass filter 185 of Gillig et al. would be incorporated into the module of Zargari along with the high pass filter 187, or how the necessary 2nd combiner filter 152 of Ke et al. would be incorporated into the module of Zargari along with the 1st combiner filter 154. In addition, the Examiner has failed to provide any motivation for including these necessary elements in the module of Zargari.

Instead, it appears that the Examiner has completely ignored these facts, and has merely picked only so much from the various prior art references as would support his position. It is impermissible within the framework of § 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. In re Wesslau, 353 F.2d 238, 241, 147 USPQ 391 (CCPA 1965).

Therefore, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness in the rejection of claims 1, 8 and 15.

The Examiner relied upon official notice, Furutani et al. ('973), Erickson, Hiraka et al., Kushitani et al., Furutani et al. ('776), and Kitazawa et al. to allegedly cure various

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deficiencies of Zargari, Gillig et al. and Ke et al. However, none of official notice, Furutani et al. ('973), Erickson, Hiraka et al., Kushitani et al., Furutani et al. ('776), and Kitazawa et al. teaches or suggest the features of "said high-frequency filter is a high-pass filter" as recited in Applicants' claim 1, "said high-frequency filter is a notch filter" as recited in Applicants' claim 8 or "one of a high-pass filter and a notch filter arranged to attenuate spurious high-frequency signal" as recited in Applicants' claim 15.

Accordingly, Applicants respectfully submit that Zargari, Gillig et al., Ke et al., official notice, Furutani et al. ('973), Erickson, Hiraka et al., Kushitani et al., Furutani et al. ('776), and Kitazawa et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of elements recited in Applicants' claims 1, 8 and 15.

In view of the foregoing amendments and remarks, Applicants respectfully submit that Claim 1, 8 and 15 are allowable. Claims 2-7, 9-14 and 16-25 depend upon claims 1, 8 and 15, and are therefore allowable for at least the reasons that claims 1, 8 and 15 are allowable.

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

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The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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